Data Sheet

We make sure

FUJITSU COMPUTERS SIEMENS

PRIMERGY RX200 S4

Dual Socket Quad-Core Intel® Xeon® Processor based 1 U Rack Server - Reliable and efficient workhorse for server farms

Issue May 30, 2008

Pages 2

PRIMERGY RX servers are perfect answers for an IT strategy that seeks to downsize data center infrastructure costs by enhancing transparency of structure, management overhead and maximize the use of investments.

With RX rack servers and the PRIMECENTER rack enclosures, you benefit from our renowned experience in data center technology, which assures the best quality of data center operation. To guarantee heterogeneous data center assets, the PRIMECENTER modular design accommodates seamless integration of PRIMEPOWER compute nodes, storage SAN and NAS subsystems, as well as other infrastructure components such as hubs, KVM switches and more, using a universal power circuit structure.

Cost-effective scaling, simplified operation and enhanced quality of data center IT production are the main benefits in deploying PRIMERGY RX servers. Their centralized PRIMERGY Server View Suite management functions mean less troubleshooting and costs and remote access from anywhere at any time. The flexible custom supply model and our build-to-order process means that only fully built and pre-tested rack solutions are shipped to the customer – shortening your time to production.

PRIMERGY RX200 S4

Consolidation strategies for corporate applications in data center server farms with central deployment and control face a number of requirements. Even more important than the best performance per unit of height is ease of management for ongoing cost optimization and operational efficiency in the data center. And since the best things to manage are those that hardly ever fail. Therefore the new dual Xeon RX200 with its integrated fail-safe standards such as modular RAID, up to 4x hot-plug 2.5-inch SAS or 2x 3.5-inch SATA/SAS disks, mirrored or hot-spare memory support, all packed into a space-saving 1 U workhorse, provides you with enhanced quality of service for the management of your business applications.
In addition, you can relax as regards your decision on when and how to use the option of 64-bit computing or virtualization: RX200 S4 comes with the latest Dual- or Quad-Core Intel Xeon processor 5200/5400 series and up to 48 GB PC2-5300F fully buffered memory.

Benefits	Key Features
■ High overall productivity through outstanding Dual-/Quad-Core performance with fast FSB, large L2 cache and extended 64-bit address space and therefore more direct useable memory and performance	■ Dual- or Quad-Core Intel Xeon 5200/5400 series and 6/2x 6 MB SLC offer outstanding Dual- or Quad-Core performance and balanced architecture that incorporates latest memory and I/O technologies
■ Computing power on compact space	■ SAS/SATA HD, 48 GB memory, storage integration Fibre channel add on, 1 U
■ Minimum management overhead for reliable operation	■ Failsafe standards – 2x 3.5-inch or 4 x 2.5-inch hot-plug hard disks, modular RAID, memory mirroring and hot-spare memory support, redundant fans, LEDs, integrated Remote Management Controller ■ hot-plug redundant power supply, integrated iRMC Advanced Pack, ServerView Local Service Panel (LSP) oder Local Status Display (LSD) (options)
■ Top-speed communications link via LAN as standard will assure continuity in failover mode	■ 2 x Gbit/s Ethernet LAN with TCP/IP accelerator plus switchable Service LAN (dedicated or shared)

Type	Dual Socket Rack Server
System board	D 2671
Chip set	Intel® 5000P
Processors	Dual- or Quad-Core Intel® Xeon® (1 - 2)
Frequencies (GHz)	5148 (2.33) LV 40W DC / L5240 (3.00), 50W, E5205 (1.86) 65W; X5260 (3.33) 80W DC / L5310 (1.60), L5410 (2.33), L5420 (2.50) 50W QC / E5405 (2,00), E5420 (2.50), E5430 (2.66 GHz), E5440 (2.83), 80W, X5460 (3.16) 120W QC
Front-Side-Bus	1066 (E5205, L5310), 1333 MHz
Second-Level-Cache	4 MB (51xx), 2x 4 MB (53xx), 6 MB (52xx), 2x 6 MB (54xx) ECC
Memory	1 GByte up to max. 48 GByte
4-way interleaved, FullyBuffered DIMM DDR2 FBD667; ECC; 2 boards (1x standard), 12 slots divided into 2 branches with 2 channels each and 3 slots per channel for PC2-5300F modules with 512, 1, 2 and 4 GB; SDDC (Chipkill), Memory Mirroring and hot-spare option, memory upgrade only possible per branch with module pairs	
Flash-EPROM	
Local BIOS update with floppy disk; Remote BIOS update via LAN with Global-Flash	
Interfaces	
Serial	1x Serial RS-232-C (9 pin), usable for iRMC S2 or system or shared
Keyboard, Mouse	2x PS/2
Graphics	1x VGA (15-pin)
USB 2.0	2 x front, 2x back, 1x internal for USB stick
LAN	2x System LAN 10/100/1000 RJ45, 1x Service LAN 10/100 (opt. shared on system LAN)
Onboard or integrated controller**	
SATA configuration Chip set ESB2-T	2-channel controller for SATA RAID 0, 1 (for 2x 3.5-inch HDD´s only) 1 x SATA channel for DVD
SAS configuration **in internal PCIe slot either** (LSI 1064) **or** LSI 1078	4 port SAS for internal HDD´s with RAID 0, 1 (Integrated Mirroring Enhanced also for odd numbered HD´s for Windows and Linux) 8 port SAS for internal HDD´s (2.5-inch) with RAID 0, 1, 10, 5, 6 (256 or 512 MB RAID Cache and opt. BBU)
LAN (2x BroadCom5708)	2x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration)(PXE-Boot via LAN from PXE server), iSCSI Boot (also diskless) via onboard LAN
Server management	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory) incl. graphics controller, IPMI 2.0 compatible
Hard disk drives	73, 146, 300 Gbyte 3.5-inch SAS **or** 36, 73, 146 Gbyte 2.5-inch SAS **or** 160, 250, 500, 750 Gbyte 3.5-inch SATA; no mix of SAS/SATA, no later conversion from 3.5 to 2.5-inch possible
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
I/O Slots	PCIe
1x PCIe x8 Standard or Low Profile – 170 mm length 1x PCIe x8 Low Profile – 170 mm length, and 1x PCI-e x4 internal for modular RAID controller only	
Drive bays	
for hard disks	2x 3,5-inch for hot-plug SATA/SAS **or** 4x 2,5-inch for hot-plug SAS option
for accessible drives	1 x 3.5/0.5-inch for opt. ServerView Local Service Panel (LSP) or Local Status Display (LSD) 1 x 5.25/0.5-inch for SATA DVD option
System fans	
Hot-plug redundant fans (2x 5 +1 redundancy)	
Electrical values	
1x Hot-plug power supply unit as standard. Additional hot-plug unit for redundancy option	

Output power	650 W / 1 + 1 x 650 W each
Rated voltage range	100V – 127V / 200V - 240V
Rated frequency	50 - 60 Hz
Max. rated current	100V–127V / 200V-240V / 8A –4A
Rated current in basic configuration	100V–127V / 200V-240V / 5A –2.5A
Active power	530W
Apparent power	555VA
Heat emission	1900 kJ/h (1810 btu/h)
Temperature/Noise/Dimensions/Weight	
Ambient temperature	10°C - 35°C (DIN IEC 721-3-3) class 3K2 ETSI 300 019-2-3 Class 3.1
Declared noise emission according to ISO 9296	idle* operating* (*ISO 7779) ETSI 300 753 Class 3.1
L_{WAd} (1 B = 10 dB) :	6.7 B 7.5 B
L_{pAm} (bystander position):	50 dB 58 dB
Overall measures	44 * 430 * 770 (mm); (HxWxD)
Rack mounting depth: Rack height units: Rack cable depth:	745 mm, 1 U, 100 mm (900 mm Rack recommended)
Rack integration kit	Telescopic Rails with full extraction or partial extraction optional
Weight	~ 16 kg (depends on configuration)
Compliance with Norms and Standards	
Product safety	
Global	IEC 60950-1
Europe	EN 60950-1
USA	UL 60950-1
Canada	CAN/CSA-C22.2 No. 60950-1
Electromagnetic compatibility	
This product and the released accessories, are in compliance with emission class A. In certain cases measures have to be taken to reduce the electro magnetic influence to other equipment.	
Europe	EN 55 022 class A, EN 55024, EN61000-3-2 / -3, ETSI EN300386
USA / Canada	FCC class A
Declaration of conformity	
Europe (CE)	2004/108/EC(EMV);2006/95 EC(LVD)
North America	FCC class A
Approvals	
Product safety	
Global	CB
Europe	CE
USA / Canada	CSA_{US} / CSA_{C}
There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons, can be applied for on request.	
Supported server operating systems	
See actual release status operating systems: e.g. Windows Server 2003; Windows Server 2008, Novell SUSE Linux Enterprise Server , Red Hat Enterprise Linux; VMware ESX (Support of Debian, Ubuntu, Mandriva Linux and other Linux derivatives on demand)	
** For supported controllers (onboard and PCI cards for SAS, SATA, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.	
Server Management (see separate data sheets)	
Standard	PRIMERGY ServerView Suite; PDA, ASR&R
Optional (excerpt)	RemoteView, iRMC S2 Advanced Pack
Front panel	
On/off switch; NMI-, reset button; LEDs for global error (amber/ yellow for Health and CSS), identification (blue), hard disks access (green), power (amber/green); (back: global error, identification, LAN activity, LAN mode)	

All rights reserved, including intellectual property rights. Technical data subject to modifications and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded.
Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.
For further information see http://www.fujitsu-siemens.com/terms_of_use.html

Copyright © Fujitsu Siemens Computers 06/2008

Published by

Fujitsu Siemens Computers
http://www.fujitsu-siemens.com/

Company stamp